

ANNEXURE-A TO TENDER No. DID 4982P08/GC DATED 23/4/2007

Terms of Reference for Implementation of Wireless LAN in Corporate Administrative Building at Duliajan

1.0 INTRODUCTION

Oil India Limited (OIL), a premier public sector company engaged in exploration, production and transportation of hydrocarbons, intends to implement, on a turnkey basis, a secured wireless access point-based Local Area Network in its newly constructed Corporate Administrative Building at Duliajan. The said LAN shall provide the users in the corporate administrative building access to OIL's campus network for E-Mail, Intranet, Internet, SAP ERP and other network-based applications.

2.0 GENERAL SPECIFICATION

2.1 The Wireless Network should be conforming to 802.11g standard operating in 2.4Ghz ISM band.

2.2 The wireless LAN has to cater for a minimum of 150 nodes spread around the building.

2.3 Wireless access points (AP) must abide by all central government, state government and local laws, rules and regulations pertaining to wireless networks. For any violation of the above, the implementing vendor shall be responsible.

2.4 Must provide minimum 128-bit shared key authentication.

2.5 Wireless Access Points shall require user authentication at the Access Points before granting campus or internet services. Wireless network interfaces and end-user devices shall have to support authentication to access wireless networks that allow connectivity to campus network backbone.

2.6 Physical security should be considered when planning the location of wireless access points and other wireless network components.

2.7 Wireless password and data must be encrypted.

2.8 Wireless network must be designed and deployed to avoid physical and logical interference between components of different network segments and other equipment.

2.9 Labeling of the fielded wireless devices must be carried out.

2.10 The Access Points have to be placed strategically within the building so that the range does not exceed the physical perimeter of the building or allow unauthorized users to eavesdrop near the perimeter. Site survey tools have to be used by the vendor implementing the network for secured access point coverage and limiting access point coverage to the building perimeter. The received signal strength of the Access Points APs has to be measured at the building perimeter at different points as given by OIL and the report has to be submitted to OIL for acceptance.

2.11 Access Points should have power-level control features to enable control of radiated power by the network administrator.

2.12 During implementation of the network, vendor has to configure the Access Points in accordance with established security policies and requirements. AP configuration shall include setting of administrative passwords, encryption settings, reset function, automatic network connection function, Ethernet MAC

Access Control List settings, shared key and SNMP settings in addition to other necessary configurations for proper functioning of the Access Points.

2.13 Site survey has to be carried out by the vendor to determine number of APs required per floor, their channel(s) of operation, and determining their coverage area.

2.14 Access Points should support logging facilities.

2.15 The supplied WLAN devices should support SNMPv3 or other encrypted management capabilities.

2.16 Wireless network proposed should support various operating systems like Windows XP, Windows Vista, Linux and other Unix OS.

2.17 All networking devices quoted by the vendor should be from CISCO Systems.

3.0 SCOPE OF WORK

The scope of work includes, but not limited to:

3.1 Site Survey: Bidders shall depute CISCO certified network personnel to OIL, Duliajan to carry out site and building survey in order to plan and design an appropriate wireless network for OIL's corporate building. The cost of such visit has to be borne by the bidder.

3.2 Design: Design, supply of equipments, accessories & cables, configuration of supplied equipments for successful operation, implementation with necessary cabling etc. as per general specification of the network mentioned in 2.0 above.

3.3 Preparation of Layout Drawing and other related documentation as per industry standard.

3.4 Supply & Installation: Vendor shall have to supply, install and configure 150 nos. of necessary wireless interface cards for individual PCs and configure Laptops. The appropriate network management software and drivers required for the network cards should also be provided by the vendor.

3.5 All networking devices quoted by the vendor should be from CISCO Systems.

3.6 Testing & Implementation: Testing of the network for successful operation to the satisfaction of OIL, including testing of network access security, interference between access points, wireless power radiation limit, connectivity to OIL's existing LAN etc.

3.7 The vendor shall be responsible for interfacing the Wireless LAN with OIL's existing campus network. OIL shall provide SMF connectivity to the building from their nearest POP of existing campus network.

3.8 Any inter-device cabling should be through UTP CAT 6 copper cable or Indoor Fiber Optic Cable. The cables/ connectors/ network outlets/ Line Interface Units etc. supplied should be of either D-Link/ DAX Network make.

3.9 All cabling has to conform to industry standard.

3.10 The vendor shall have to submit a cable layout drawing to OIL in hard and soft copy formats.

3.11 Successful bidder has to carry out necessary labeling of the Access Points and other devices as per satisfaction of OIL.

3.12 After successful implementation of the network, successful bidder shall have to handover the Username and Passwords, hardcopy documentation of the configuration setting of the devices deployed for the wireless network, Cable Layout drawing with device labels and other related documentation on the said wireless network. Also, successful bidder has to provide product literature including configuration and operations manual of the supplied equipments to OIL.

3.13 Any other job necessary for successful and secured operation of the wireless network.

4.0 WARRANTY

4.1 Successful bidder has to provide minimum 1 year On-site warranty for the implemented wireless network.

4.2 Warranty has to cover all equipments & accessories supplied by the successful bidder, workmanship of any cabling, equipment fixing work carried out by successful bidder.

4.3 During the warranty period, any failed device shall have to be replaced with a new device within 24 hrs. of reporting the failure. Necessary configuration of the replacement device for proper operation of the device in the said Wireless Network is responsibility of the successful bidder.

4.4 During the warranty period, the successful bidder has to supply and upgrade, free of cost, any firmware upgrade released by the OEM of the equipment supplied by the bidder.

4.5 Labeling of the replaced network device shall be responsibility of the successful bidder.

4.6 During the warranty period, the engineer attending the call shall have to submit a call report mentioning nature of the fault, action taken, any replacement of parts, serial no. of replaced equipment and serial number of replacement equipment and any other details of the call to OIL. The report has to be duly signed by OILs IT engineer and then only the call shall be considered attended.

4.7 In case of failure on the part of the successful bidder to rectify a reported problem within 24 hrs of reporting the problem, warranty period for the whole network shall be extended by 1 (One) day for each day's delay beyond the said period of 24 hrs.

4.8 Warranty shall also include any problem related to breach of security of the network access.

4.9 All visits (including transport to and from Duliajan and accommodation at Duliajan) by bidder's personnel for warranty- related work shall have to be borne by the successful bidder.

4.10 The vendors should stock critical spares / standby network devices during warranty period to ensure 99% uptime of the wireless network.

5.0 ANNUAL MAINTENANCE CONTRACT

5.1 Bidder has to quote for 4 years Annual Maintenance Contract for the implemented wireless network.

5.2 The Annual Maintenance Contract shall start after successful completion of warranty period.

5.3 For any reason, if the warranty period is extended, AMC shall start after completion of the extended warranty period.

5.4 During the AMC period, any failed device shall have to be replaced with a new device within 48 hrs. of reporting the failure. Necessary configuration of the replacement device for proper operation of the device in the said Wireless Network is responsibility of the successful bidder.

5.5 During the AMC period, the successful bidder has to supply and upgrade, free of cost, any firmware upgrade released by the OEM of the equipments supplied by the bidder.

5.6 Labeling of the replaced network device shall be responsibility of the successful bidder.

5.7 During the AMC period, the engineer attending the call shall have to submit a call report mentioning nature of the fault, action taken, any replacement of parts, serial no. of replaced equipment, serial number of replacement equipment and any other details of the call to OIL. The report has to be duly signed by OIL's IT engineer and then only the call shall be considered attended.

5.8 In case of failure on the part of the successful bidder to rectify a reported problem within 48 hrs of reporting the problem, AMC period for the whole network shall be extended by 1 (One) day for each day delay beyond the said period of 48 hrs.

5.9 AMC shall include any problem related to breach of security of the network access.

5.10 All visits (including transport to and from Duliajan and accommodation at Duliajan) by bidder's personnel for AMC related work shall have to be borne by the successful bidder.

5.11 The vendors should stock critical spares / stand by network devices during AMC period to ensure 99 % uptime of wireless network.

6.0 ELIGIBILITY CRITERIA

6.1 Bidders have to be authorized system integrators or Gold Partners of Cisco Systems. The bidder must provide relevant authorization from Cisco Systems stating that the bidder is an authorized system integrator of Cisco Systems or a Gold Partner of Cisco Systems and their authorization is valid upto or beyond eighteen (18) months from the bid closing date of this tender.

6.2 The bidder must provide necessary documentary evidence of design, supply of equipment and successful implementation of wireless network(s) having a minimum of 100 nodes using Cisco Wireless Network Products anywhere in India. OIL reserves the right to visit such installation(s) for necessary verification. If OIL so desires, the bidder has to obtain necessary permission from the competent authority of such installations for the visits.

7.0 DELIVERY, INSTALLATION & COMMISSIONING

7.1 Successful bidder has to deliver all equipment and complete the Installation and commissioning of the network in all respects within 90 days from the date of issue of LOI.

8.0 PAYMENT TERMS

8.1 OIL will release 50% FOR Duliajan value against delivery.

8.2 On Successful Completion of Installation and training, if AMC charges quoted are less than 10% of total FOR Duliajan value, then 40% FOR Duliajan value will be paid, or, if AMC charges quoted are more than 10% of FOR Duliajan value, then Balance amount, excluding AMC charges, will be paid.

8.3 The balance 10% FOR Duliajan value or AMC charges quoted will be released in four equal installments after successful completion of each year's AMC, i.e. payment @ 2.5% will be released annually at the end of 1st, 2nd, 3rd and 4th years of AMC.

8.4 Successful bidder will be required to furnish a Performance Bank Guarantee @10% of Total FOR Duliajan value of the order. The Performance Bank Guarantee must be valid for five years from the date of successful commissioning of the equipment to cover the entire warranty and AMC period.

9.0 TRAINING

9.1 The vendor shall have to impart training to minimum three (3) engineers of OIL on configuration, operation, security aspects of Wireless Networks and control of the supplied equipments by a CISCO authorized training partner.

9.2 Training must be conducted before installation and commissioning of the wireless network so that OIL's engineers can have hands-on experience during commissioning of the equipment.

9.3 Duration of training must be for a minimum of three (3) days.

9.4 Training charges have to be quoted as per bidding format given in 11.0 of this document.

10.0 OTHER TERMS & CONDITIONS

10.1 Successful bidder must follow all safety norms prescribed by OIL while carrying out the job.

10.2 Successful bidder has to obtain necessary security pass etc. to enter the worksite. OIL shall arrange for the necessary security passes.

10.3 Successful bidder has to arrange for all necessary tools, measuring equipments for carrying out the job.

10.4 Successful bidder has to arrange for their own accommodation during implementation period.

11.0 BIDDING FORMAT

11.1 Bidders have to quote in the following format:

Sl.No.	Item Description	Qty	Rate	Amount (Rs.)
1	Site Survey and Design			
2	i) Item 1 Qty Quoted as per Design			
	ii) Item 2 Qty quoted as per design			
	iii) Item 3 Qty quoted as per design			
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3	Installation and Commissioning			
4	Annual Maintenance Contract as per clause 5.0 above for a period of four (4) years @ Rs---. per annum			

5 Training Charges

Total (Rs.): -----